# National Advisory Council on Minority Health and Health Disparities Director's Report

September 1, 2023

Eliseo J. Pérez-Stable, M.D.

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#### White House Appoints New CDC Director

#### Mandy Cohen, M.D., M.P.H.

- Sworn in as the new Director of the Centers for Disease Control and Prevention (CDC) on Monday, July 10, 2023
- An internal medicine physician who led the North Carolina Department of Health and Human Services



# Selection of Director for the National Institute of Allergy and Infectious Diseases

#### Jeanne M. Marrazzo, M.D.

- Will join NIH in the fall of 2023
- Comes to NIH from the University of Alabama at Birmingham where she was the Director of the Division of Infectious Diseases
- Will oversee NIAID's budget of \$6.3 billion—which supports research to advance the understanding, diagnosis, and treatment of infectious, immunologic, and allergic diseases





# Selection of NIH Associate Director for the Office of Behavioral and Social Sciences Research

#### Jane M. Simoni, Ph.D.

- Joined NIH on July 30, 2023, and will lead the NIH Office of Behavioral and Social Sciences Research (OBSSR) efforts to advance and coordinate behavioral and social sciences research at NIH
- Has more than 25 years of experience in research focused on health disparities and resilience among populations that have been socially marginalized, including people with HIV, Latino individuals, LGBTQ+ individuals, and Indigenous peoples



# Patricia Flatley Brennan, R.N., Ph.D. Director of the National Library of Medicine

- Will retire from federal service, after seven years at NLM, on September 30, 2023
- Advanced the role of NLM as the epicenter for biomedical data science at NIH



- Brought a unique approach to integrating health information management with artificial intelligence, machine learning, and deep learning
- Stephen Sherry, Ph.D., Director of the National Center for Biotechnology Information will serve as the NLM Acting Director





#### **New Council Members**

- Samuel E. Adunyah, Ph.D.
   Meharry Medical College, Nashville, Tennessee
- Jose A. Bauermeister, Ph.D., M.P.H. University of Pennsylvania, Philadelphia
- Valarie Blue Bird Jernigan, Dr.PH., M.P.H.
   Oklahoma State University Center for Health Sciences, Tulsa, Oklahoma
- Lisa M. Cacari Stone, Ph.D.
  University of New Mexico, Albuquerque
- Kendrick E. Curry, Ph.D., M.Div.
   The Pennsylvania Avenue Baptist Church Washington, District of Columbia
- Frank J. Penedo, Ph.D.
   University of Miami Coral Gables, Florida

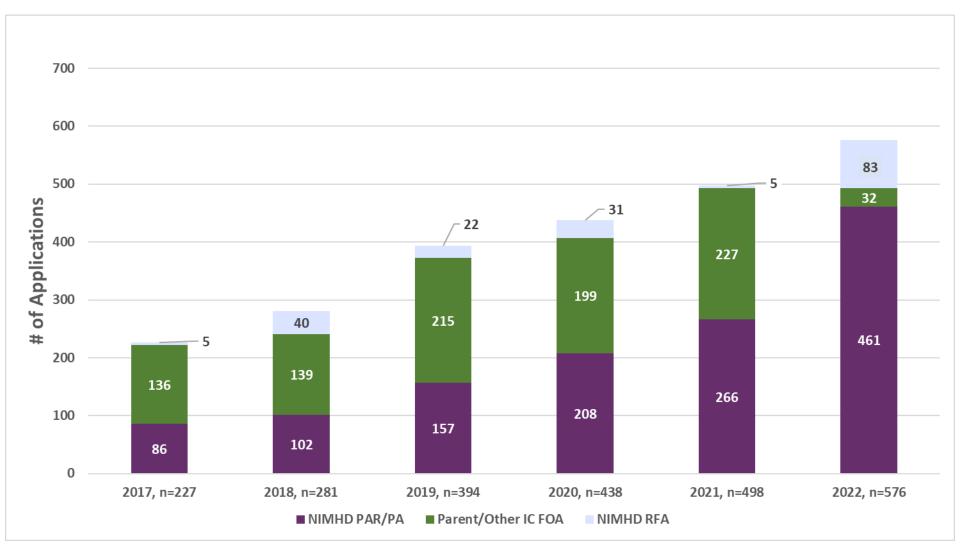


#### **R01 Applications and Award Rate**

Fiscal Year	Number of R01 Applications	Awards	Success Rate %
2022	546	100	18.3%
2021	494	64	13.0%
2020	437	42	9.6%
2019	394	41	10.4%
2018	281	39	13.9%
2017	227	59	26.0%



#### Sources of NIMHD R01/U01 Applications







#### **NIMHD Staff Updates: New Hires**

### Division of Clinical and Health Services Research

- Shilpa Amin, Ph.D.
   Health Scientist Administrator
- Lynne Padgett, Ph.D.
   Health Scientist Administrator





#### Office of Extramural Research Activities

Chantell Stevenson-Brown
 Grants Management Specialist



#### **Director's Presentations**

#### May 2023

 American Thoracic Society International Conference Keynote Address

#### **July 2023**

 Healthy Moments segment about Community Engagement Alliance Against COVID-19 Disparities, or CEAL

#### August 2023

- NIMHD Health Disparities Research Institute
- University of Florida medical students: Addressing Health Disparities
- NIH Tribal Advisory Committee (TAC) Meeting









#### John Lewis NIMHD Research Endowment Program

- Announced August 1, 2023
- Will support minority health and health disparities research capacity and infrastructure at six institutions



- Florida International University, Miami, Florida
- 2. University of North Texas Health Sciences Center, Fort Worth
- 3. SUNY Downstate Medical Center, Brooklyn, New York
- 4. Charles R. Drew University of Medicine and Science, Los Angeles, California
- 5. Meharry Medical College, Nashville, Tennessee
- 6. Xavier University of Louisiana, New Orleans





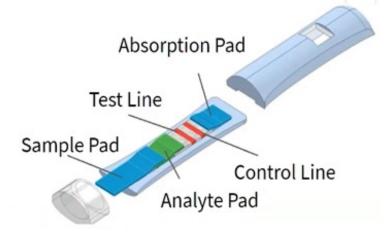
# 2023 Design by Biomedical Undergraduate Team (DEBUT) Challenge

- Annual contest for undergraduate teams to design creative new solutions to emerging health care problems
- Led by the National Institute of Biomedical Imaging and Bioengineering, and VentureWell, with participation from several NIH institutes

### NIMHD sponsors the Healthcare Technologies for Low-Resource Settings for \$15,000

### DioTex Johns Hopkins University

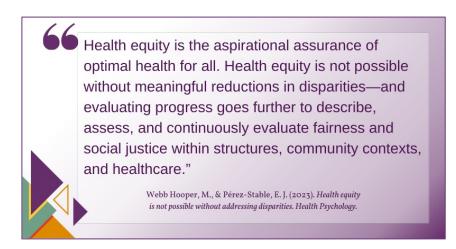
- Point of care internal hemorrhage diagnostic tool
- Potential to improve assessment and treatment of internal trauma
- Easy to use in low resource and rural settings
   Visit DEBUT





# NIMHD Commentary on Health Equity Published in *Health Psychology*

- Monica Webb Hooper and Eliseo J. Pérez-Stable
- Highlights NIMHD's commitment to advancing health equity and describes the institute's efforts in two specific areas:
  - Workforce diversity, equity, and inclusion (DEI)
  - Scientific initiatives
- Underscores that achieving health equity is not possible without confronting and addressing health disparities



#### Read the full commentary





#### **NIMHD Research Priorities**

- Race and ethnicity, and SES are the fundamental pillars of health disparities science
- NIMHD research must prioritize these factors
- Intersectionality of race and ethnicity, and SES with rural populations and SGM individuals
- Re-evaluate reference population, as White people often do not have the best health outcomes
- Establish aspirational goals for all based on national metrics

#### Learn more





# 2023 NIMHD Health Disparities Research Institute

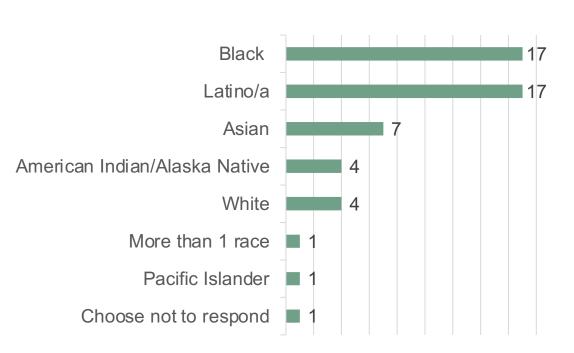
2023 NIMHD Health Disparities Research Institute August 7 – 11

- Applications: 197
- Participants: 52 early-stage career scientists representing 24 states, the District of Columbia, and Guam





#### 2023 HDRI Cohort Summary (N=52)



Sex	Count	Percent
Female	42	81
Male	10	19
Degree		
PhD/DrPH	32	61
MD	15	29
RN, MN, MSN,		
APRN, FNP-C	4	8
DDS	1	2
Position/Title		
Assistant Professor	30	58
Postdoctoral Fellow	17	32
Clinical Instructor	3	6
Associate Professor	1	2
Research Investigator	1	2

The 2024 HDRI dates will be announced in late December Visit <a href="https://nimhd.nih.gov/hdri">https://nimhd.nih.gov/hdri</a>





# HDPulse Recognized as Resource for Improving Minority Health and Reducing Health Disparities

Office of Minority
Health highlighted
HDPulse in its Health
Resources Digest

"What are health disparities, and how do they affect your community? Find the answers on HDPulse, an ecosystem of health disparities data and intervention materials from the National Institute on Minority Health and Health Disparities."

Honorable Mention in AcademyHealth's 2023 Health Equity DataJam

- DataJam is an effort to harness the power of data and the creativity of the public to answer pressing questions related to health and health care disparities
- Spotlighted through AcademyHealth's website, blog, and social channels
- Watch the <u>HDPulse submission</u>

Visit the **HDPulse** 



#### **HHS Secretary's Commendation**

#### **Dorothy Castille, Ph.D.**

Recognized for exceptional service and leadership during the Public Health Emergency phase of the COVID-19 Pandemic



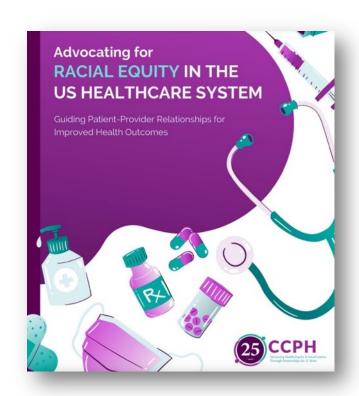


Dr. Dorothy "Dottie" Castille (center) accepts her award from HHS Deputy Secretary Andrea Palm (left) and HHS Secretary Xavier Becerra (right)



# Reference Guide from RADx-UP Advocating for Racial Equity in the U.S. Health Care System

- RADx-UP Black/African Americans Working Group and Community-Campus Partnerships for Health
- Goal to help patients and clinicians better navigate the barriers related to structural racism in US health care
- Provides education and resources to facilitate patient and clinician engagement and address barriers contributing to poorer health outcomes among communities that are underserved



<u>Learn more</u>



# Community Engagement Alliance (CEAL) Against COVID-19 Disparities Spotlight

#### Florida CEAL Research Team

- Developed a community outreach project that focused on recruiting and training barbers and beauty salons to spread accurate information about COVID-19 and vaccination
- Adapted a train-the-trainer program that addressed the nature of the virus, the development of the vaccine, and how to protect yourself and your community



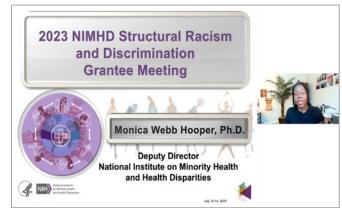
Barbers in Jacksonville serve as information hubs during pandemic

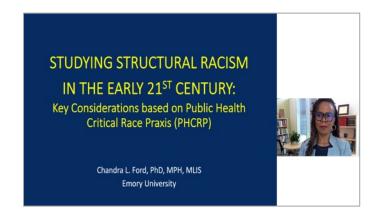
**Learn More** 



# 2023 NIMHD Structural Racism and Discrimination (SRD) Grantee Meeting

- Held virtually July 13-14, for grantees and their study teams funded by RFA-MD-21-004, "Understanding and Addressing the Impact of Structural Racism and Discrimination on Minority Health and Health Disparities"
- Brought together NIH leaders and SRD principal investigators, and included 19 SRD grantee presentation
  - ~150 unique participants which includes more than 80 grantees/study teams
- Opening remarks by NIMHD Deputy Director Monica Webb Hooper, Ph.D.
- Keynote address by Chandra L. Ford, Ph.D.,
   M.P.H., M.L.I.S., from Emory University







### Science Advances

# Disparities in Guideline-Recommended Statin Use for Prevention of Cardiovascular Disease

- NHANES from 2015-2020
- Adults aged 21 to 75 eligible for statin therapy for primary (n=4,763) or secondary prevention (n=1,138)
- Adjusted prevalence ratio (aPR) for statin use with White men as reference group
- Model adjusts for measurable patient and structural factors

For Primary Prevention	aPR
Black Men	0.73
Non-Mexican Latina Women	0.74

For Secondary Prevention	aPR
Black Men	0.81
Other/Multiracial Men	0.58
Mexican American Women	0.36
Non-Mexican Latina Women	0.57
White Women	0.69
Black Women	0.75

Frank, D., et. al, *Annals of Internal Medicine*, July 2023.





# Risk Factors and Racial and Ethnic Disparities in Cardiovascular Disease Mortality

National Health and Nutrition Examination Survey 1999-2018 data linked with National Death Index 1999-2019 data

- N= 50,808; mean age= 47 years; 50% female; 21% Black, 26% Latino, 44% White, 9% other race
- Black-White disparity is reduced when adjusted for metabolic or behavioral risk factors; eliminated when adjusted for social factors

Top Risk Factors	CVD Mortality Hazard Ratio*	Race and Ethnicity	CVD Mortality Rate* (deaths per 100,000 person-years)
Current Smoking	2.11	Black	485
Unemployment	2.02	Latino	292
Diabetes	2.00	White	385
Low Family Income	1.90	Other Race	255
Food Insecurity	1.86		

<sup>\*</sup>Age- and sex-adjusted

He, J., et. al, <u>Annals of Internal Medicine</u>. 2023.





# Supplemental Nutrition Assistance Program Access and Racial Disparities in Food Insecurity

- 2018 Survey of Income and Program Participation (SIPP)
- 4,974 SNAP-eligible households—5% Asian, 22% Black, 65% White, 8% multiracial or other race
- Overall prevalence rates by household race:
- SNAP Use: Multiracial (48%) and Black (54%) > White (37%)
- Food Insecurity: Multiracial (32%) and Black (30%) > White (25%)

#### Adjusted\* Food Insecurity Prevalence Rates

<b>SNAP-Enrolled Households</b>	Non-SNAP-Enrolled Households		
(n= 2,052)	(n= 2,922)		
16% lower for Black vs. White	52% higher for Black vs. White		

16% lower for Black vs. White
 Multiracial = White
 42% higher for Multiracial vs. White

Samuel, L., et. al, <u>JAMA Network Open</u>. 2023





<sup>\*</sup>Adjusted for U.S. region and household characteristics

### Alzheimer Mortality Among American Indian/Alaska Native People: Trends Between 2011-2019

 County-level study of Alzheimer disease's (AD) mortality rates among Al/AN people and associations of county characteristics with AD mortality risk in Indian Health Services purchased/referred care delivery areas, using 2011-2019

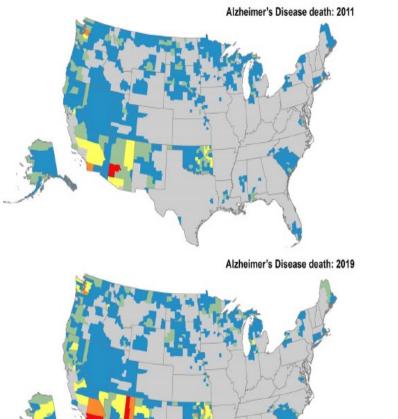
 Age-adjusted AD mortality rate increased by 22% from 36.2/100,000 people in 2011 to 44.2/100,000 in 2019

AD mortality risk was 14% lower as Al/AN population density increased

 AD mortality risk was 34% higher in more deprived counties vs. less deprived counties

 AD mortality risk was 20% lower in nonmetro counties compared to metro counties

Grant No. U54MD000507







# Implicit Measures of Discrimination to "People of Color"

- "People of Color" (POC) was introduced in late 20th century to counter condescension for the terms "non-White" and "minority"
- Tested 3 racial and ethnic categories: "POC" versus "Black people" and "Hispanic people" for White, Black, and Hispanic groups with implicit and explicit discrimination and attitudes
- Participant showed implicit discrimination and explicit discrimination towards POC, Black, or Hispanic groups; White participants were neutral to POC for implicit bias

Race/Ethnic Categories	Group	Brief Implicit Association Test (B-IAT)
POC-White	White NH	0.06
	Black NH	0.41*
Black-White	White NH	0.23*
	Black NH	0.41*
Hispanic-White	White NH	0.18*
	Hispanic	0.31*

\*<0.05 p

✓ Using the category for POC in implicit measures may be inappropriate to evaluate discrimination and attitudes towards Black and Hispanic individuals, because it may not capture specific experiences of discrimination and identity in these groups

Grant No. R01MD012793

Marini, M., et.al., J of Racial and Ethnic Health Disparities. 2023.



### Postpartum Expansion of Emergency Medicaid in Oregon Increased Receipt of Recommended Glycemic Screening and Care

- Conducted a diff-in-diff analysis on a sample of 2,270 live births among a predominantly multiparous, Latina population,
- Selected by linking
   Medicaid claims and birth
   certificates from 2010 to
   2019 in Oregon and South
   Carolina (control state)
- **✓** Expansion of coverage
  - Increased receipt of a recommended glucose tolerance test
  - Increased diagnosis of Type 2 diabetes

**Table:** Changes in primary and secondary outcomes among Emergency Medicaid enrollees with gestational diabetes after postpartum coverage expansion

Postpartum Expansion of Emergency Medicaid Increased Receipt of Recommended Glycemic Screening and Care

	Treatment (Oregon)		Comparison (South Card		Difference-in- difference estimate
	Pre-policy	Post-policy	Pre-policy	Post-policy	Adjusted difference
	N = 969	N = 610	N = 432	N = 261	
	No. (%)	No. (%)	No. (%)	No. (%)	% (95% CI)
Primary outo	comes				
GTT/blood sugar testing	35 (3.6)	159 (26.1)	6 (1.4)	3 (1.1)	23.0 (16.0–29.9)
Type 2 diabetes mellitus diagnosis	4 (0.4)	27 (4.4)	2 (0.5)	0 (0.0)	4.6 (3.3–6.0)
Secondary of	outcomes	·			
Postpartum visit attendance	83 (8.6)	365 (59.8)	76 (17.6)	55 (21.1)	47.3 (38.4–56.2)
Postpartum contraceptio	, ,	281 (46.1)	11 (2.5)	21 (8.0)	27.2 (18.9–35.7)
Hospital readmission	7 (0.7)	19 (3.1)	4 (0.9)	0 (0.0)	3.2 (1.3–5.1)

Grant No. R01MD013648

Rodriguez, M. I., et al., J Immigr Minor Health. 2023.



### Lived Experiences of Racism and Patient-Clinician Communication Among Black Adults with Serious Illness

- Black patients with serious illness experience higher intensity care at the end of life.
- One-on-one semi-structured interviews with 25 hospitalized Black patients with serious illness between January 2021 and February 2023
- Discussed experiences with racism in health care settings and how these affected communication with clinicians and medical decision-making
- ✓ Reported silencing of their knowledge and lived experiences about their bodies and illness by health care workers was the most common manifestation of racism
- ✓ Intersecting marginalized identities reported greater feelings of isolation and devaluation when experiencing racism
- ✓ Experiences with racism were associated with negative patientclinician communication outcomes
- ✓ Prior experiences with mistreatment from health care workers and medical trauma influenced medical decision-making

Grant No. K23MD015270

Brown, C., et al., JAMA Network Open. 2023.



#### Differential Treatment and Outcomes for Patients With Heart Attacks

- Percutaneous coronary intervention (PCI) within 15 minutes of ED presentation is associated with better outcomes.
- In areas with high levels of deprivation do differences in PCI access affect outcomes in MI care?
- All-payer nonpublic patient discharge data from California, 2006 2020 among 629,419 patients with MI residing in 1,723 zip code communities
- Area Deprivation Index to categorize communities Patients in the most advantaged communities had:
  - 3.1% (95% CI, 1.0–5.2) and 5.9% (95% CI, 3.8–8.0) absolute greater likelihood of receiving same-day PCI
  - 8% (95% CI, 3.2–12.8) absolute greater likelihood of receiving PCI during hospitalization
  - 2.1% (95% CI, -2.7 to -1.4) absolute lower i30-day mortality rate (19% relative decrease)
  - 3.9% (95% CI, -4.8 to -3.0) absolute lower 1-year mortality rate (16% decrease)

Grant No: R01MD017482 Shen, Y., et al., J Am Heart Assoc (In Press). 2023.



# Periodontal Disease (PD) Treatment after Stroke or Transient Ischemic Attack (TIA)

- The PeRiodontal treatment to Eliminate Minority InEquality and Rural disparities in Stroke (PREMIERS) study tested whether intensive PD treatment reduces the risk of recurrent vascular events among ischemic stroke and high-risk TIA survivors compared to standard PD treatment
- Participants were >18 years, hospitalized with a recent ischemic stroke or high-risk TIA, had at least 5 natural teeth and signs of moderately severe PD (< 90 days from index event)</li>

Intervention Treatment	Standard Treatment
Five sessions of full-mouth intensive removal of dental plaque biofilms from supragingival and subgingival scaling	Full mouth supragingival scaling using hand instruments and ultrasonic scalers under constant irrigation to remove <b>only</b> supragingival plaque and calculus

✓ PREMIERS phase 2 trial failed to establish superiority of intensive treatment to standard treatment of PD in prevention of primary outcome (stroke/MI/death)

Grant No. R01 MD009738





Sen, S., et al., Stroke. 2023.

# Family Functioning and Psychosocial Symptoms Among Latino Patients Coping with Advanced Cancer

- Family functioning is a component of adjustment and well-being among patients with cancer. Examine impact of family functioning on Quality of Life for Latino patients coping with advanced cancer
- Descriptive analyses on responses from 103 Latino patients (60% female) coping with stage 3 (N = 32%) and stage 4 (N = 63%) cancers
- Measures: Family Relationships Index, Hospital Anxiety Depression Scale, Functional Assessment of Cancer; Therapy
- High family functioning associated with higher QoL
- Higher QoL strongly associated with low anxiety, depression, and hopelessness
- Low cohesiveness associated with more depression and anxiety
- High expressiveness associated with low hopelessness
- ✓ Better Family functioning, associated with QoL and fewer psychosocial symptoms

Grant No. R25MD007607, R21MD013674, U54MD007579

Torres-Blasco, N., et al., Palliative & Supportive Care. 2022.



### Associations Between Prenatal Phthalate Exposure and Childhood Epigenetic Age Acceleration

- Phthalates—endocrine-disrupting chemicals in plastics and personal care products—are associated with poor developmental outcomes, but impact of phthalates on aging biomarkers in children remains unexplored.
- Mexican American mother-child pairs (N = 385) from CHAMACOS cohort:
- DNA methylation measured at birth, 7, 9, and 14 years of age
- Adjusted linear regression and quantile g-computation to assess link between prenatal phthalate exposure and 1) Bohlin's Gestational Age Acceleration <u>at birth</u> and 2) Intrinsic Epigenetic Age Acceleration <u>throughout childhood</u>
- Negative association found between prenatal phthalate metabolite exposure and epigenetic accelerated aging among male children aged 7
- Marginal negative association found between whole phthalate mixture and accelerated aging for males at birth
- ✓ Prenatal exposures on epigenetic age may only manifest during specific periods of child development and may be biological sexdependent

Grant No. R01MD016595

Khodasevich, D., et al., *Environmental Research*. 2023.



# Division of Intramural Research

#### NIH-Funded Analysis of U.S. Cause-Specific Mortality

Most comprehensive peer-reviewed study to date on how racial and ethnic disparities vary by location and cause of death

- Mortality higher in the American Indian/Alaska Native population and Black population than in the White population for most causes of death
- Geographical variation in mortality within and across racial and ethnic groups exists for all causes of death



- Cardiovascular diseases and neoplasms were the first and second leading causes of death, respectively, within and across all racial and ethnic groups.
- Diabetes and kidney diseases caused substantial mortality, landing in fifth position for leading cause of death across all racial and ethnic groups and ranking among the top five in every racial and ethnic group
- ✓ Findings will help support NIMHD's commitment to reduce disparities in the U.S. and to improve health at the local level



### Incorporating the Effects of Structural Racism in Simulation Models of Cancer Mortality

 Reviewed over 8,000 studies published from 2018-2023 on the impact of structural racism and its



- components on cancer mortality-related racial and ethnic disparities
- Identified 150 measures of structural racism including measures of racial residential segregation
- High residential segregation was associated with worse survival in Black residents with pancreatic, breast, colorectal, oral, lung, liver, and prostate cancer, and Hispanic residents with ovarian cancer
- ✓ Highlights the role of the NIMHD PhenX Toolkit to support simulation modeling research
- ✓ Identified best practices to incorporate the impact of structural racism in simulation models developed to inform U.S. cancer care policies

Grant No. ZIA MD000022

Jayasekera, J., et al., JNCI Monographs (In Press). 2023.





# Financial Hardship During COVID-19 Associated with Increased Receipt of Tobacco Discount Coupons

- Study examined the association of financial hardships during the COVID-19 pandemic and increased receipt of commercial tobacco (CT) discount coupon.
- A nationally representative sample of 1,700 US adults who used CT during the
   12 months prior to Jan-Feb 2021 were surveyed online
- Over one-fifth of US adults who used CT received more discount coupons.
- CT users experiencing financial hardships were more likely to have received more discount coupons for commercial tobacco

More discount coupons for	AOR for every additional domain of financial hardship
Cigarettes	1.13*
Electronic vaping products	1.15*
Cigars and cigarillos	1.17*
Hookah and other combustibles	1.20*
Smokeless tobacco	1.23*

 The tobacco industry continues to use marketing strategies to target individuals who are financially vulnerable







# Community Outreach and Collaboration to Expand the Scientific Workforce

- CAPT Anthony (AJ) Johnson, Scientific Advisor and Training Director, NIMHD/DIR, attended the 2023 Society for Epidemiologic Research (SER) Annual Conference in Portland, Oregon, June 13-16, 2023
- Over 2,000 scientific professionals and young investigators attended
- CAPT Johnson provided education on the NIMHD Intramural Research Training Program and commitment to national outreach and recruitment to expand workforce diversity in biomedical research





# 2023 NIH Summer Internship Poster Presentation Day





















#### Summer Intern Presenters:

**Top Row:** Julia Zhang, Laney Smith, Briana Adjei, Kayleigh Fenton, Emma Martinez **Bottom Row**: Rahaf Zaza, Gauri Sood, Amaya Pablo, Soma Freeman, Sana

Rahman

#### The NIH-Wide Stadtman Investigator Search





- Annual search open to all doctoral-level, biomedical and behavioral researchers interested in NIH intramural tenure-track positions
- Searching for researchers studying important problems in innovative ways
- Deadline: September 30, 2023

#### For details scan QR code or visit

https://irp.nih.gov/careers/faculty-level-scientific-careers/stadtmantenure-track-investigators



#### NIMHD Vacancy Announcements

# JOIN OUR AMAZING TEAM!

NIMHD seeks outstanding candidates to support our vision of an America in which all populations have an equal opportunity to live long, healthy and productive lives.

Learn more at <a href="https://nimhd.nih.gov/about/employment.html">https://nimhd.nih.gov/about/employment.html</a>



https://nimhd.nih.gov/about/employment.html



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### Discussion